CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0405829
Insp Area: 1
Thos Bros:
Sub-Type: REM
Housing (Y/N): N

Site Address: 1215 K ST SAC St: #2101
Parcel No: 006-0111-012 SUITE 2101 - 21ST FLOOR

CONTRACTOR
ANTHONY & SONS
1790 TERMINAL ST.
WEST SACRAMENTO CA

OWNER
ESQUIRE PARTNERS L.L.C.
3100 ZINFANDEL DR #160
RANCHO CORDOVA, CA 95670

ARCHITECT

Nature of Work: INTERIOR REMODEL - INSTALL DEMISING WALLS TO SEPARATE TENANTS

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name_____ Lender'sAddress_____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class B License Number 360117 Date 4-15-04 Contractor Signature _____

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00);

_____ I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

_____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

_____ I am exempt under Sec._____ B & PC for this reason:_____

Date_____ Owner Signature_____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and herby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 4-15-04 Applicant/Agent Signature _____

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:
_____ I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

CC I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

PAID
CITY OF SACRAMENTO
APR 15 2004

Carrier STATE FUND Policy Number 713-0[illegible] UNIT 0000126 Exp Date 10/01/2004

_____ (This section need not be completed if the permit is for $100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

NORTH PLAN CENTER

Date 4-15-04 Applicant Signature _____

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

~~THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.~~

#0405827

Test and Balance Analysis Report

Porter Novelli @ Esquire Plaza 21st floor
1215 'K' Street
Sacramento, CA

FINAL AIR BALANCE CO., INC
License# 777985

NEBB Certified 3222

CONTRACTOR

TABB Certified BB104006C

FINAL AIR BALANCE CO., INC
Testing & Balancing – Industrial & Environmental Systems
13020 Piper Hill Dr. Penn Valley, CA 95946
Ph: (530) 432-2226 Fax: (530) 432-2901

TEST AND BALANCE ANALYSIS REPORT FOR

Porter Novelli @ Esquire Plaza 21st floor
1215 'K' Street
Sacramento, CA

Architect:

Engineer: **Frank M. Booth Design Build Co.**
4220 Douglas Blvd.
Granite Bay, CA 95746
(916) 784-0777

Contractor: **Frank M. Booth Design Build Co.**
4220 Douglas Blvd
Granite Bay, CA 95746
(916) 784-0777

This is to certify that Final Air Balance Co., Inc. has balanced the systems described herein to their optimum performance capabilities, unless otherwise noted in the project summary.

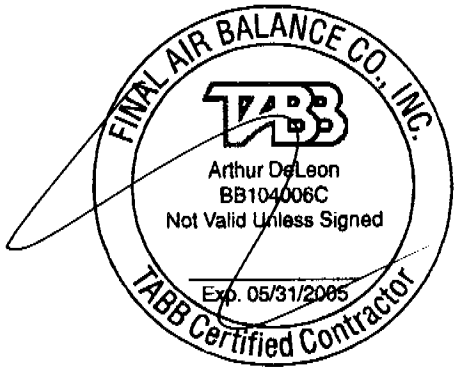
NEBB Certification: 3222

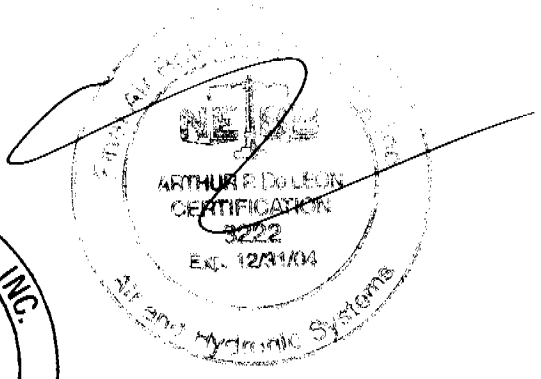
TABB Certification: BB104006C

Date : 5/28/04

FAB Job Number: 0405J502

Approved : Art De Leon





National Environmental Balancing Bureau

NEBB

Certification

THIS IS TO CERTIFY THAT

Final Air Balance Company, Inc.

in Penn Valley, CA

HAS MET ALL THE NEBB REQUIREMENTS TO

Perform and Manage

TESTING AND BALANCING. AND AGREES TO CONFORM TO

NEBB PROCEDURES AND STANDARDS FOR

Air and Hydronic Environmental Systems

2002-2004

Final Air Balance Company, Inc./CA

No. 3222

FOR THE BOARD OF DIRECTORS:

Karen D. M. Bolton

PRESIDENT

Ted J. Talkin

VICE-PRESIDENT

National Environmental Balancing Bureau

NEBB

Certificate of Qualification

THIS IS TO CERTIFY THAT

Arthur P. DeLeon

with Final Air Balance Company, Inc. in Penn Valley, CA

HAS QUALIFIED TO SUPERVISE ENVIRONMENTAL

TESTING AND BALANCING PROCEDURES FOR

Air and Hydronic Environmental Systems

FOR THE BOARD OF DIRECTORS:

Ted J. Talkin

PRESIDENT

VICE-PRESIDENT

2004

Final Air Balance Company, Inc./CA

International Certification Board

TESTING, ADJUSTING AND BALANCING BUREAU

CERTIFIED SUPERVISOR

Sheet Metal and Air Conditioning Industry

This certifies that

Arthur P. DeLeon

has completed the requirements of Certification as a Testing, Adjusting and Balancing Supervisor

on

March 28, 2003

BB1620028
Certification #

March 28, 2003
Valid Date

March 31, 2005
Expiration Date

1983

Roy Ringwood
Labor Co-Chairman

William Hume
Management Co-Chairman

Administrator of TABB

FINAL AIR BALANCE CO., INC
Testing & Balancing – Industrial & Environmental Systems
13020 Piper Hill Dr. Penn Valley, CA 95946
Ph: (530) 432-2226 Fax: (530) 432-2901

Performance Guarantee

Pursuant to the agreement between

FINAL AIR BALANCE CO., INC.

And

Frank M. Booth Design Build Co.

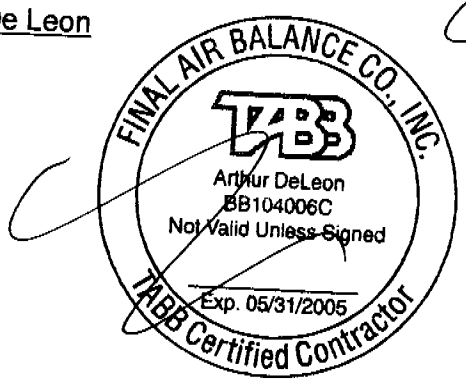
All systems shall be balanced in accordance with the plans and specifications and to the optimum performance capabilities of the equipment and design. Testing and balancing shall be done in accordance with the standards published by the National Environmental Balancing Bureau.

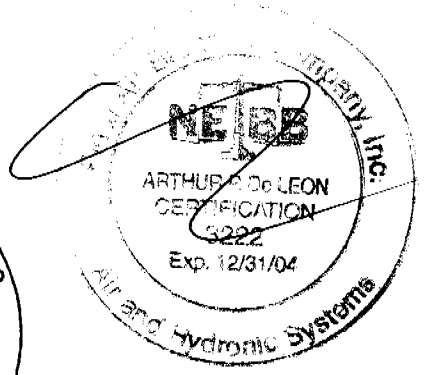
Air Balance performed by Final Air Balance Co., Inc. shall be guaranteed for one year. This applies to all equipment and air distribution per specifications on the Final Test & Analysis Report. Any problems will be investigated and corrected at no additional charge. This guarantee is void if the systems involved are changed in any way or adjusted by another person(s), facilities, or another air balance company.

Project Name Porter Novelli @ Esquire Plaza 21st floor

Date 5/28/04

By Arthur De Leon





FINAL AIR BALANCE CO., INC
Testing & Balancing – Industrial & Environmental Systems
13020 Piper Hill Dr. Penn Valley, CA 95946
Ph: (530) 432-2226 Fax: (530) 432-2901

TEST AND BALANCE INSTRUMENTATION

The following ***bold/italicized*** instruments were used to successfully measure and set each device on this project. These instruments meet the National Environmental Balancing Bureau's minimum guidelines for accuracy and calibration.

Instrument	Manufacturer	Model	Serial number	Calibration Date
Air Data Multimeter	***Shortridge***	***ADM860***	***M02540***	***12/23/03***
Air Data Multimeter	Shortridge	ADM870	M00755	8/28/03
Amp/Volt Meter – Digital	Fluke	36 AC/DC True RMS	78203626	11/26/02
Amp/Volt Meter - Digital	Fluke	36 AC/DC True RMS	78203394	1/06/04
Amp/Volt Meter - Digital	Fluke	336 AC/DC True RMS	80904943	12/23/03
Amp/Volt Meter - Analog	A.W. Sperry	SPR300	A-CG6659	1/15/03
Duct Leakage Test Kit with Oriface Tube 4"	McGill Airflow	LTK-SCA	48608	N/A
Oriface Tube 4"		2"	2310-S	12/23/02
Flow Hood - Analog	Alnor	1 1/16"	2861-S	12/23/02
Flow Hood - Digital	***Shortridge***	6461	3845/1735	12/23/03
Flow Hood - Digital	Shortridge	***8400***	***M02540***	***12/23/03***
Hydronic Manometer	Alnor	8400	M00755	8/28/03
Manometer - Digital	Dwyer	HM650	393	12/23/03
Pitot Tube	Dwyer	475-1	N45N / 3209	12/23/03
Pitot Tube	Dwyer	18"	———	N/A
Pitot Tube	Dwyer	36"	———	N/A
Pitot Tube	Dwyer	48"	———	N/A
Pressure Gauge – Digital	PSI-Tronix	60"	———	N/A
Pressure Gauge – Digital	PSI-Tronix	PG2000CG	3208	1/6/04
Rotating Vane Ananometer	Davis	PG2000CG	8024652-1	12/23/03
Sound Level Meter	Extech	LCA 6000	060896	12/23/03
Sound Level Calibrator	Extech	407764	020620718	8/21/02
Tachometer - Digital	Monarch	407766	P879365	8/21/02
Tachometer - Digital	Monarch	Tach-100	1354512	12/23/03
Tachometer - Digital	Monarch	Tach-100	1354509	11/26/02
Thermo Anemometer – Digital	Ametek	Tach-100	1355785	12/23/03
Thermometer – Non contact	Dwyer	1726	112191088	1/15/03
Thermometer - Thermocouple	Raytek	471-3	N-210	12/23/03
	Fluke	RAYST20	2039480201-0001	1/6/04
		51-II	80390110	12/23/03

Definitions of Abbreviations, Terminology, and Symbols

A	Nameplate Amps
AHU	Air Handling Unit
AC or ACU	Air Conditioner or Air Conditioning Unit
ACCU	Air-Cooled Condensing Unit
ACH	Air Changes per Hour
ACV	Automatic Control Valve
AMB	Ambient
AMP	Ampere
AP	Access Point or Panel
AVG	Average
BAD	Bypass Air Damper
BHP	Brake Horsepower
BTU	British Thermal Unit
BTUH	British Thermal Units per Hour
CAV	Constant or Continuous Air Volume
CC	Cooling Coil
CD	Ceiling Diffuser
CFM	Cubic Feet per Minute
CG	Ceiling Grille
CH	Chiller
CHWR	Chilled Water Return
CHWS	Chilled Water Supply
COP	Coefficient of Performance
CP	Circulating Pump
CR	Ceiling Register
CT	Cooling Tower
CU	Condensing Unit
CUH	Cabinet Unit Heating
CV	Control Valve
CWR	Condenser Water Return
CW or CWS	Condenser Water Supply
DAT	Discharge Air Temperature
DB	Dry Bulb
DD	Direct Drive
DIA	Diameter
Delta	Difference, net decrease or increase
DNA	Data Not Available
DNL	Data Not Listed
E	Existing
EA	Exhaust Air
EAT	Entering Air Temperature
Economizer	Controls and componentry that allow an air handler to logically utilize outdoor air for cooling as opposed to the use of mechanical cooling.
EDB	Entering Dry Bulb
EDC	Electric Duct Coil
EDH	Electric Duct Heater
EF	Exhaust Fan
EG	Exhaust Grille
EMS	Energy management System(s)
EMCS	Energy Management Control System(s)
ENT	Entering
ER	Exhaust Register
ESP	External Static Pressure
EWB	Entering Wet Bulb
EWT	Entering Water Temperature
FCU	Fan Coil Unit
FCV	Flow Control Valve
FD	Fire Damper
FG	Floor Grille
FLA	Full Load Amperage
FLEX	Flexible
FLTS	Filters
FPB	Fan Powered Box
FPM	Feet Per Minute
FR	Floor Register
FSD	Fire Smoke Damper
FTU	Fan Terminal Unit
GA	Gauge
GPM	Gallons per Minute
HC	Heating Coil
HD	Head pressure measured in inches or feet of water
Heater O.L.	Thermal Overload protection for motors located at the motor starter
HEPA	High Efficiency Particulate Air Filter
HOA	Hand/Off/Auto switch
HP	Horsepower
HPS	High Pressure Steam
HRC	Heat Recovery or Reclaim Coil
HVAC	Heating, Ventilating & Air Conditioning
HWR	Hot Water Return or Heating Water Return
HWS	Hot Water Supply or Heating Water Supply
HX	Heat Exchanger
Hydronic	Indicates the use of conveyance of liquid for Thermal transfer
ID	Inside Diameter
IV	Inlet Vanes
K	Correction Factor
LAT	Leaving Air Temperature
LD	Linear Slot Diffuser
LDB	Leaving Dry Bulb
LPS	Low Pressure Steam
LRA	Locked Rotor Ampere
LV	Leaving
LWB	Leaving Wet Bulb
LWG	Low Wall Grille
LWR	Low Wall Register
LWT	Leaving Water Temperature
MAU / MUA	Make-up Air Unit or Make-up Air
MAX	Maximum
MBH	Thousand BTU's per Hour
MIN	Minimum
MVD	Manual Volume Damper
(N)	New
N/A	Not applicable
N/L	Not Listed
NIC	Not in contract
OBD	Opposed Blade Damper
OD	Outside Diameter
OSA or OA	Outside Air
OAT	Outside Air Temperature
P	Circulating Pump
PF	Power Factor
PH	Phase(s)
PRV	Pressure Relief Valve

PSI	Pounds per Square Inch
R	Return Air or Round (for sizes)
RA	Return Air
RAT	Return Air Temperature
REQ	Required
RF	Return Air Fan
RG	Return Grille
RHC	ReHeat Coil
RLA	Running Load Amps
RM	Room
RPM	Revolutions per Minute
S	Supply
SA	Supply Air
SAT	Supply Air Temperature
SD	Supply Diffuser
SEF	Smoke Exhaust Fan
SF (air)	Supply Fan
SF (elect)	Service Factor
SHC	Steam Heating Coil
SP	SetPoint
SPF	Stairwell Pressurization Fan
SP "WC"	Static Pressure resistance measured in inches Of Water Column
SWG	Sidewall Grille
SWR	Sidewall Register
TAB	Testing, Adjusting, and Balancing
TCP	Temperature Control Valve
TP	Traverse Point or Test Point
TSP	Total Static Pressure
TV	Turning Vanes
TYP	Typical
UH	Unit Heater
V	Volt or Voltage
VAV	Variable Air Volume
VD	Volume Damper
VEL	Velocity
VFD	Variable Frequency Drive (electric motor speed controller)
VP	Velocity Pressure
W	Watts
W/	With
WB	Wet Bulb
WG	Water Gauge

#	Symbol for PSI or pounds per square inch

SUMMARY

No comments

FINAL AIR BALANCE COMPANY, INC.

Date: 05/28/04

Sheet no: 1

VAV TEST SHEET

JOB NAME: Porter Novelli @ Esquire Plaza 21st floor

SYSTEM: VAV 21-10, VAV 21-11, VAV 21-13

Room No.	Terminal No.	Terminal Type	Terminal Size	Effective Area	Max Design FPM	Max Design CFM	Max Final FPM	Max Final CFM	Minimum CFM Design	Minimum CFM Final	Notes
	VAV-21-10		10"								
Server	10-1	CR	10 x 10	FH	FH	400	FH	420			
Office	10-2	CR	10 x 10	FH	FH	225	FH	225			
				Factor = 112		**625**		**645**	**225**	**230**	
	VAV-21-11		8"								
Office	11-1	CR	10 x 10	FH	FH	450	FH	450			
				Factor = 163		**450**		**450**	**140**	**140**	
	VAV-21-13		8"								
Office	13-1	CR	8 x 8	FH	FH	225	FH	230			
Office	13-2	CR	8 x 8	FH	FH	225	FH	225			
				Factor = 146		**450**		**455**	**140**	**145**	

FH = Direct read with flow hood

Factor = Calibration factor

Remarks: